

# HERITAGE AT THE END OF THE WORLD

## How Antarctic Historic Sites and Monuments Stabilize Scientific Identity

### 1. INTRODUCTION & BACKGROUND

Antarctica is a unique, hostile continent that poses significant challenges to permanent human life due to extreme environmental conditions and isolation. Human presence in Antarctica is artificial, functional, and temporary. Under the Antarctic governing body called the Antarctic Treaty System (ATS), 91 Historic Sites and Monuments (HSMs) are currently recognized and protected.

**The Paradox:** Why does a regime that is focused on peace and science concentrate and provide resources to preserve cultural heritage in a landscape of constant environmental erasure?

**The Thesis:** Heritage sites provide the psychological infrastructure for transforming transient space into a permanent scientific place. They provide ontological security (Grenville 2007) by anchoring the community to a lineage of endurance and international law.

### Graphical Abstract: The Stabilisation Cycle

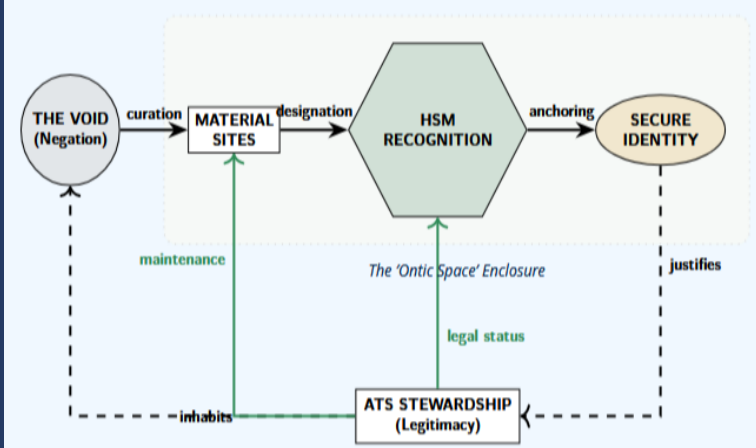


Diagram 1: Materializing memory to withstand environmental erasure.

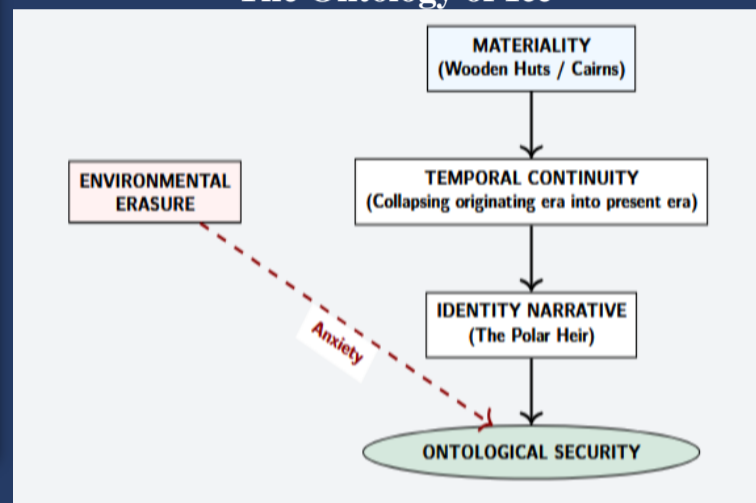
### 2. THEORETICAL FOUNDATION

➤ **Ontological Security:** Based on Jane Grenville's (2007) work, heritage serves as a psychological bulwark against a transient and untrustworthy external world.

➤ **Ontic Spaces:** In times of critical situations, material environments become extensions of the collective identity and provide continuity (Ejdus 2017).

➤ **Scientific Identity:** Heritage rituals and sites provide a temporal bridge, linking modern researchers to a heroic lineage of discovery (Giddens 1991).

### The Ontology of Ice



### 3. METHODS

Qualitative synthesis of historical archives, ATS management plans, and field reports. Comparison to the transition from military to scientific regimes (Operation Tabarin to Musuem/tourist Post Office of Port Lockroy) and the inclusion of non-Western lineages (Japanese Shirase Expedition).

### 4. PSYCHOLOGICAL BULWARKS

Material culture from the 'Heroic Age' (Scott's Hut HSM-10, Shackleton's Hut HSM-19) provides Lineage Security. The sensory materiality, the smell of blubber and old wood, collapses the temporal gap, assuring researchers they are part of a continuous human tradition.

### 7. INDIGENOUS COSMOLOGIES

Māori narratives of *Hui Te Rangiora* (7th C) challenge the *terra nullius* myth. Inclusion of the *pouwhenua* (carved post) at Scott Base in 2013 linked the station into a site of Indigenous cosmology, providing Cultural Ontological Security that predates European arrival (Wehi et al. 2021).

### IMPLICATIONS:

1. Identity: Heritage is a primary survival mechanism.
2. Diplomacy: Repurposing ruins builds transnational trust.
3. Resilience: Caring for decay fosters community hope

### 10. KEY REFERENCES

Ejdus, Filip. 2017. "Not a heap of stones: Material Environments and Ontological Security" *Cambridge Review of International Affairs* 30(1): 23-43.  
 Giddens, Anthony. 1991. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Cambridge: Polity Press.  
 Grenville, Jane. 2007. "Conservation as Psychology: Ontological Security and the Built Environment." *International Journal of Heritage Studies* 13(6): 447-61.  
 Wehi, Priscilla M., Nigel J. Scott, Jasmine Beckwith, Rata Pryor Rodgers, Tammy Gillies, Vincent van Uitregt, and Krushil Watene. 2022. "A Short Scan of Māori Journeys to Antarctica." *Journal of the Royal Society of New Zealand* 52 (5): 587-98.



Photo: Port Lockroy as an HSM, Photo Credit: UKAHT



Photo: Port Lockroy in 1944, BAS Archive



Photo: Fukushima Rock Cairn (HSM 2), Photo Credit: Ryo

### 5. TRANSNATIONAL MEMORY

The Japanese Expedition (1910-12) led by Nobu Shirase was exception to the Anglo-centric power. The Fukushima Cairn (HSM-2) at Syowa Station anchors Japanese identity through ritualized capability, proving that the need for material anchors is a transnational human requirement.

### 6. SUBLIMATING CONFLICT

The evolution of Operation Tabarin (1944), from being a clandestine naval strategy to enforce sovereignty, into the collaborative framework of the ATS represents the primary route of Antarctic reconciliation. Port Lockroy (HSM-61) serves as physical proof of this transition, where infrastructure modified for military exclusion has been repurposed into a site of transnational engagement, materializing the post-war shift toward memorialization.

### 8. ANTHROPOCENE ARK

Climate change introduces Anthropocene Insecurity. As HSMs melt out of permafrost (e.g., Cape Adare), they become Monuments for the End of the World Managed Loss: Embracing Curated Decay as grief work.

- Dissonant Heritage: The Vostok Tractor (HSM-11) is heritage, while the Greenpeace Base was erased as pollution.
- Space Blueprint: The ATS model provides the roadmap for managing heritage on the Moon or Mars

### 9. CONCLUSIONS

Antarctic heritage is the infrastructure of temporal residency. By preserving material heritage in the continent, communities construct the psychological stability to occupy the feelings of existence. Heritage transforms the living in a hostile place into a shared human landscape of peace, science, and memory.

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